UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,030	09/27/2001	Yoshikatsu Niwa	450100-03503	2594

20999	7590	04/05/2006

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER
SHIN, KYUNG H

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/965,030	NIWA ET AL.
	Examiner	Art Unit	
	Kyung H. Shin	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-7 and 9-11* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7 and 9-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This action is responding to application papers filed 1/24/2006.

2.   Claims **1 - 12** are pending. Claims **1, 5, 9** have been amended. Claims **4, 8, 12**

have been canceled. Independent claims are **1, 5, 9**.

Response to Arguments

3.   Applicant's arguments filed 1/24/2006 have been fully considered but they are not

persuasive.

> 3.1   1.1   Applicant argues that the referenced prior art does not disclose *" ...*
>
> *there is no motivation to combine Yeung, Bastiani, Takabatake, and*
>
> *Lappetelainen ... " (see Remarks Page 7, Lines 20-21) ; " ... no motivation in*
>
> *the prior art of record to modify an IEEE-1394 bus conforming to the BRAN*
>
> *specification to create the data transfer apparatus recited in claim 1 ... " (see*
>
> *Remarks Page 8, Lines 3-5) ; " ... nothing has been found within the*
>
> *knowledge within the level of ordinary skill in the art at the time the invention*
>
> *was made, to modify a person of ordinary skill in the art to combine the*
>
> *reference teachings to create the data transfer apparatus as claimed in claim 1*
>
> *... " (see Remarks Page 9, Lines 7-10)*
>
> The Yeung (6,643,702), Bastiani (6,636,922), Takabatake (6,728,244), and
>
> Lappetelainen (6,693,915) referenced prior art are all data transfer systems and
>
> are all analogous art. Yeung discloses a data transfer system utilizing a serial

bus (see Yeung col. 1, lines 12-16; col. 2, lines 48-50), Bastiani discloses (see

Bastiani col. 2, lines 19-22; col. 2, lines 28-30) a data transfer system utilizing a

serial bus, Takabatake discloses a data transfer system utilizing a serial bus

(see Takabatake col. 3, lines 45-49), and Lappetelainen discloses a data

transfer system utilizing a serial bus (see Lappetelainen col. 1, lines 46-51).

One of ordinary skill in the art would be motivated to employ Bastiani in

order to provide and optimize a more robust communications protocol between

systems and peripherals in an interconnected network environment. (see

Bastiani col. 2, lines 19-22)   Yeung discloses a method for determining whether

at least one eligible route (i.e. path) has required resources available for

communications. (see Yeung col. 1, lines 59-61)   Bastiani disclose the

capability to determine whether a destination node is available and a

communications path (i.e. route) is available. (see Bastiani col. 10, line 66 - col.

11, line 3)   In addition, there is motivation to combine Yeung and Bastiani to

solve the same problem, which is the successful (i.e. available resources, paths,

routes) delivery of data over a network route (i.e. a communications path).

One of ordinary skill in the art would be motivated to employ Takabatake in

order to interconnect IEEE 1394 buses to more effectively utilize wireless (i.e.

radio) resources within an interconnected network environment (see

Takabatake col. 1, lines 12-16), and to employ Lappetelainen in order to

effectively optimize performance of radio based communications (see

Lappetelainen col. 4, lines 52-5).

Yeung discloses communications utilizing the Internet (see Yeung col. 2,

lines 41-43), the usage of audio, video multimedia devices attached to the

Yeung switch (see Yeung col. 2, lines 36-41), and an expectation that

modifications can be made to the implementation with no degradation of

invention. (see Yeung col. 1, lines 27-31)   In addition, there is motivation to

combine Yeung with Takabatake and Lappetelainen to solve the problem of

successfully interconnecting dissimilar network protocols such as are available

within an Internet type network environment and to enable the usage of large

audio/video data transmissions over high speed communications paths (i.e.

Internet) desired by current trends. (see Takabatake col. 1, lines 27-35) and

(see Lappetelainen col. 1, lines 15-25)

Therefore, the rejection of claims 1-12 is proper and maintained herein.

Claim Rejection - 35 USC § 103

The text of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4.   **Claims 1 - 3, 5 - 7, 9 - 11** are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Yeung** (US Patent No. 6,643,702) in view of **Bastiani et al.** (US

Patent No. 6,636,922) and further in view of **Takabatake** (US Patent No. 6,728,244)

and further in view of **Lappetelainen et al.** (US Patent No. 6,693,915).

Regarding Claims 1 (Currently Amended), **5** (Currently Amended), **9** (Currently

Amended), Yeung discloses a data packet processing apparatus, network system, data

transfer method for connecting a plurality of buses and for transmitting data through a

first one of the plurality of buses to a second one of the plurality of buses, according to

destination information related to the data.   (see Yeung col. 2, lines 44-56: " ... a switch

... number of ingress ports and egress ports in the switch may vary depending on ...

how many devices or buses are served by the switch ... ") Yeung does not disclose

determining that the destination node is not connected. However, Bastiani discloses a

data transfer apparatus, network system, data transfer method for connecting buses

comprising:

   a) transmitting means for determining according to the destination information

      whether a node serving as a destination of the data is connected to the second

      one of the buses, wherein, when the means for determining determines that the

      node is not connected, a data transmission source receives a predetermined

      error information signal; (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path

      failure determination, destination node not connected (i.e. path failure),

      predetermined alarm (i.e. action: error bits set, packet processed as error packet)

      completed)

   b) wherein at least one packet of the data, transmitted to the node that is not

      connected, is processed as an error packet; (see Bastiani col. 9, lines 30-36; col.

      34, lines 6-19: path failure notification, destination node not connected (i.e. path

      failure), predetermined alarm (i.e. action: error bits set, packet processed as error

      packet) completed) and

c) wherein the destination information comprises a node ID and a bus ID. (see

Bastiani col. 11, lines 36-40; col. 12, lines 22-24: device addressing (i.e. node ID,

bus ID) utilized for communications ; col. 10, lines 59-63; col. 12, lines 39-43:

interface (i.e. bus, port) addressing utilized)

Yeung does not disclose an IEEE 1394 bridge based on the BRAN

specification. However, Lappetelainen discloses:

d) the <u>BRAN specification</u> is equivalent to the HIPERLAN specification (see

Lappetelainen col. 1, lines 46-51: HIPERLAN specification equal to BRAN

specification) and Takabatake discloses <u>an IEEE 1394 bridge</u> based on the

HIPERLAN specification. (see Takabatake col. 21, lines 49-53; col. 3, lines 56-

61; col. 8, lines 24-29: HIPERLAN (High Performance Radio Access Network)

specification and wireless IEEE 1394 standards for a network device used in

data transmissions) Therefore, the combination of Takabatake and

Lappetelainen discloses the data transfer apparatus according to claims 1, 5, 9,

wherein the data transfer apparatus is an IEEE-1394 bridge device <u>conforming to</u>

<u>the BRAN specification.</u>

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Yeung to determine connection availability of destination

node and to process communications failure as taught by Bastiani, and to utilize a

wireless IEEE 1394 device operating as a bridge based on the BRAN (HIPERLAN)

specification as taught by Takabatake and Lappetelainen. One of ordinary skill in the

art would be motivated to employ Bastiani in order to provide and optimize a more

robust communications protocol between systems and peripherals in an interconnected

network environment (see Bastiani col. 2, lines 19-22: " ... *providing an advanced serial*

protocol (ASP) that defines a more robust data transmission environment for

communication between host computers and peripheral devices ... "), and to employ

Takabatake in order to interconnect IEEE 1394 buses to more effectively utilize wireless

(i.e. radio) resources within an interconnected network environment (see Takabatake

col. 1, lines 12-16: " ... *realizing data transfer between interconnected different networks*

by identifying packets on each network, managing correspondences of packets between

different networks, and converting packets ... "), and to employ Lappetelainen in order

to effectively optimize performance of radio based communications (see Lappetelainen

col. 4, lines 52-57: " ... *attain more effective utilization of the radio resources ... produce*

a more disturbance-free data transmission system ... ").

Regarding Claims 2 (Currently Amended), **6** (Currently Amended), Yeung does not

disclose the determination that the destination node exists on a network. However,

Bastiani discloses the data transfer apparatus, network system, data transfer method

according to claims 1, 5, wherein the means for determining determines according to

the destination information whether the bus to which the node serving as the destination

of the data is connected, exists on a network, and wherein when the bus does not exist,

transmits predetermined error information to the data transmission source. (see Bastiani

col. 9, lines 30-36; col. 34, lines 6-19: path analysis and failure notification sequence or

predetermined alarm (action) is completed when it is determined that destination node

is not connected or path fault),

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Yeung to determine that the destination node is not

connected and to process communications fault as taught by Bastiani. One of ordinary

skill in the art would be motivated to employ Bastiani in order to provide and optimize a

more robust communications protocols between systems and peripherals in an

interconnected network environment. (see Bastiani col. 2, lines 19-22)

Regarding Claims 3, 11, Yeung discloses the data transfer apparatus, network system,

data transfer method according to claims 1, 9, wherein the data transfer apparatus is

connected to another bus through a second data transfer apparatus, and wherein the

data transfer apparatus further comprises transfer means for transferring the data from

the data transfer apparatus to the second data transfer apparatus according to the

destination information. (see Yeung col. 2, lines 44-56: destination network node is

another data processing apparatus)

Regarding Claim 7 (Currently Amended), Yeung discloses the data transfer apparatus,

network system, data transfer method according to claim 5, wherein the data transfer

apparatus is connected to the second bus through a second data transfer apparatus,

and the data transfer apparatus further comprises transfer means for transferring the

data from the data transfer apparatus to the second data transfer apparatus according

to the destination information. (see Yeung col. 2, lines 44-56: destination network node

is another data processing apparatus)

Regarding Claim 10, Yeung does not disclose the determination that the destination

node exists on a network. However, Bastiani discloses the data transfer apparatus,

network system, data transfer method according to claim 9, wherein, in the second step,

it is determined according to the destination information whether the bus to which the

node serving as the destination of the data is connected, exists on a network, and when

the bus does not exist, predetermined error information is transmitted to the data

transmission source. (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path analysis

and failure notification sequence or predetermined alarm (action) is completed when it is

determined that destination node is not connected or a communications path failure)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Yeung to determine that the destination node is not

connected and to process communications fault as taught by Bastiani. One of ordinary

skill in the art would be motivated to employ Bastiani in order to provide and optimize a

more robust communications protocols between systems and peripherals in an

interconnected network environment. (see Bastiani col. 2, lines 19-22: " ... *serial*

protocol ... that defines a more robust data transmission environment for

communication between host computers and peripheral devices ... ")

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-

3920. The examiner can normally be reached on 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

K H S
Kyung H Shin
Patent Examiner
Art Unit 2143

***

KHS
March 27, 2006

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100